## SUBCHAPTER C : OPERATIONS REQUIRING A REGISTRATION §§332.31-332.38 Effective May 15, 1997

#### §332.31. Definition of and Requirements for Registered Facilities.

- (a) Definition of registered facilities. The following operations are subject to the requirements of this subchapter:
- (1) Operations that compost municipal sewage sludge, except those facilities that compost municipal sewage sludge with mixed municipal solid waste.
- (2) Operations that compost positively-sorted organic materials from the municipal solid waste stream.
- (3) Operations that compost source-separated organic materials not exempted under §332.3(d) of this title (relating to Applicability).
  - (4) Operations that compost grease trap waste.
  - (5) Operations that compost disposable diapers or paper products soiled by human excreta.
- (6) Operations that compost the sludge byproduct generated from the production of paper if the executive director determines that the feedstock is appropriate pursuant to §332.33 of this title (relating to Required Forms, Applications, Reports, and Request to Use the Sludge Byproduct of Paper Production).
- (7) Operations that incorporate any of the materials set forth in paragraphs (1)-(6) of this section with source-separated yard trimmings, clean wood material, vegetative material, paper, manure, meat, fish, dairy, oil, grease materials or dead animal carcasses.
- (b) Requirements for registered facilities. The operations listed in subsection (a) of this section are subject to the requirements of the General Requirements found in §332.4 of this title (relating to General Requirements), the requirements set forth in this subchapter, the requirements set forth in Subchapter G of this title (relating to End-Product Standards) and the air quality requirements set forth in §332.8 of this title (relating to Air Quality Requirements).

Adopted November 1, 1995

Effective November 29, 1995

## §332.32. Certification by Engineer, Approval by Land Owner, and Inspection.

(a) Certification by registered professional engineer. The operator shall obtain certification by a Texas-Registered Professional Engineer that the facility has been constructed as designed and is in general compliance with the regulations prior to accepting any feedstock at the facility that requires registration and maintaining that certification on-site for inspection by the commission.

- (b) Ownership or control of property. The facility shall be located on property owned by the operator or the operator shall establish, using an affidavit form provided by the commission, signed by the owner and notarized, that the owner is aware of and consents to the operation prior to any receipt of feedstock or processing activities. A copy of the affidavit shall be kept on-site at all times.
- (c) Inspection of facility. Prior to the initial acceptance of any feedstocks, the facility shall be inspected by the TNRCC to determine compliance with the registration.

Effective November 29, 1995

# §332.33. Required Forms, Applications, Reports, and Request to Use the Sludge Byproduct of Paper Production.

- (a) The operator of the compost facility shall submit the following:
- (1) TNRCC Form Number 2. The operator shall submit TNRCC Form Number 2, "Notice of Intent to Apply for a Compost Facility Registration or Permit," available from the commission; and
- (2) Registration application. The registration application described in §332.34 of this title (relating to Registration Application).
- (3) Annual report. The operator shall submit annual written reports using TNRCC Form Number 3, "Annual Report Form for Compost Facilities Requiring Registration or Permit," available from the commission. These reports shall at a minimum include input and output quantities, a description of the end-product distribution, and all results of any required laboratory testing. A copy of the annual report shall be kept on-site for a period of five years.
- (4) Final product testing report. Facilities requiring registration must submit reports on final product testing to the executive director in compliance with §332.71(j)(1) of this title (relating to Sampling and Analysis Requirements for Final Product) on a semi-annual basis.
- (b) In order to use the sludge byproduct of paper production as a composting feedstock, the operator must first receive permission from the executive director.
- (1) The operator shall submit a request to the executive director to use the sludge byproduct as a feedstock. The request may also be submitted with a registration application.
  - (2) At a minimum, the request shall present all of the following:
    - (A) identification of the source of the sludge byproduct;
- (B) a general description of the process that produces the sludge byproduct including the use of any elemental chorine bleaches used in the process;

- (C) analytical results that identify concentrations for polychlorinated dibenzo-p-dioxins (CCDs) and polychlorinated dibenzofurans (CDFs); and
- (D) a demonstration that the final product will not be harmful to human health or the environment.
- (3) The executive director or his designee shall, after review of the request, determine if he will approve or deny the request.
- (4) An operator that receives approval from the executive director to include the sludge byproduct of paper production as a composting feedstock, shall submit a new request to the executive director in accordance with this subsection if a significant change, such as a new source for the feedstock, is planned.

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#### §332.34. Registration Application.

Registration applications for composting must include:

- (1) Title page. The title page shall show the name of the project, the name of the applicant, the location by city and county.
- (2) Signature of the applicant. The signature of the applicant(s), checked against agency requirements, in accordance with §305.44 of this title (relating to Signatories to Applications).
- (3) Affidavit. A notarized affidavit from the applicant(s) verifying land ownership and landowner agreement to the proposed activity.
- (4) Table of contents. The table of contents shall list and give the page numbers for the main sections of the application.
- (5) Legal authority. The applicant shall provide verification of his/her legal status. Normally, this is a one-page certificate of incorporation issued by the Secretary of State.
  - (6) Evidence of competency. The applicant shall provide the following:
- (A) the names of the principals and supervisors of the applicant's organization relative to the proposed compost operation; and
- (B) the name, location, and permit or registration number of any compost operations or solid waste operations that it is operating or has operated in Texas.
- (7) Notice of Appointment. The applicant shall provide a notice of appointment identifying the applicant's engineer.

- (8) Notice of coordination. The applicant shall provide notice of coordination with all local, state, and federal government officials and agencies.
  - (9) Legal description. The applicant shall provide the following:
- (A) a legal description of the property and the county, book, and page number of the current ownership record from the county deed records; and
- (B) a boundary metes and bounds drawing and description of the site signed and sealed by a Registered Professional Land Surveyor;
  - (10) Location description.
- (A) Map. The applicant shall clearly show the boundaries of the planned facility on a map that is all or a portion of a county map prepared by Texas Department of Transportation (TxDOT). At a minimum, the map shall be at a scale of one-half inch equals one mile.
- (B) Geographic coordinates. The applicant shall supply geographic coordinates for the southeast corner of the facility.
- (11) Landowner list. The applicant shall include a list of adjacent landowners and their addresses along with an appropriately scaled map locating the property owned by these persons.
- (12) Site operating plan. The applicant shall submit a site operating plan. This document is to provide guidance from the design engineer to site management and operating personnel in sufficient detail to enable them to conduct day to day operations in a manner consistent with the engineer's design. At a minimum, the site operating plan shall include specific guidance or instructions on all of the following:
- (A) Process description. The process description shall be composed of a descriptive narrative along with a process diagram. The process description shall include:
- (i) Feedstock identification. The applicant shall prepare a list of the materials intended for processing along with the anticipated volume to be processed. This section shall also contain an estimate of the daily quantity of material to be processed at the facility along with a description of the proposed process of screening for unauthorized and prohibited materials.
- (ii) Tipping process. Indicate what happens to the feedstock material from the point it enters the gate. Indicate how the material is handled in the tipping area, how long it remains in the tipping area, what equipment is used, how the material is evacuated from the tipping area, at what interval the tipping area is cleaned, the process used to clean the tipping area.
- (iii) Process. Indicate what happens to the material as it leaves the tipping area. Indicate how the material is incorporated into the process and what process or processes are used until it goes to the post-processing area. The narrative shall include: water addition, processing rates, equipment, energy and mass balance calculations, and process monitoring method.

- (iv) Post-processing. Provide a complete narrative on the post-processing process, include post-processing times, identification and segregation of product, storage of product, quality assurance and quality control.
- (v) Product distribution. Provide a complete narrative on product distribution including items such as: end-product quantities, anticipated final grades, packaging, labeling, loading, and tracking bulk material.
- (vi) Process diagram. Present a process diagram that displays graphically, the narrative generated in response to clauses (i)-(v) of this paragraph.
- (B) The minimum number of personnel and their functions to be provided by the site operator in order to have adequate capability to conduct the operation in conformance with the design and operational standards.
- (C) The minimum number and operational capacity of each type of equipment to be provided by the site operator in order to have adequate capability to conduct the operation in conformance with the design and operational standards.
  - (D) Security, site access control, traffic control and safety.
- (E) Control of dumping within designated areas, screening for unprocessable, prohibited, and unauthorized material.
- (F) A fire prevention and suppression plan that shall comply with provisions of the local fire code, which shall also be sent to the local fire protection entity responsible for responding to a fire at the facility.
  - (G) Control of windblown material.
  - (H) Vector control.
  - (I) Quality assurance and quality control.
- (i) Municipal sewage sludge compost facilities. The operator shall comply with the provisions of Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation).
- (ii) All other registered facilities. As a minimum the applicant shall provide testing and assurance in accordance with the provisions of §332.71 of this title (relating to Sampling and Analysis Requirements for Final Product).
- (J) Equipment failures including alternative plans in the event of an equipment failure.
  - (K) A description of the anticipated final grade of the materials.

- (13) Construction plans and specifications. The applicant shall submit facility construction plans and specifications. The facility plans and specification shall reflect the provisions of this chapter to the maximum extent possible.
- (14) Closure plan. The applicant shall provide a plan for proper closure of the facility including disposition of any remaining feedstocks, in-process, and processed materials.

Effective November 29, 1995

## §332.35. Registration Application Processing.

- (a) An application shall be submitted to the executive director. When an application is administratively complete, the executive director shall assign the application an identification number.
  - (b) Public Notice.
- (1) When an application is administratively complete the chief clerk shall mail notice to adjacent landowners. The chief clerk also shall mail notice to other affected landowners as directed by the executive director.
- (2) When an application is technically complete the chief clerk shall mail notice to adjacent landowners. The chief clerk shall also mail notice to other affected landowners as directed by the executive director. The applicant shall publish notice in the county in which the facility is located, and in adjacent counties. The published notice shall be published once a week for three weeks. The applicant should attempt to obtain publication in a Sunday edition of a newspaper. The notice shall explain the method for submitting a motion for reconsideration.
  - (3) Notice issued under paragraphs (1) or (2) shall contain the following information:
    - (A) the identifying number given the application by the executive director;
    - (B) the type of registration sought under the application;
    - (C) the name and address of the applicant(s);
    - (D) the date on which the application was submitted; and
    - (E) a brief summary of the information included in the application.
- (c) The executive director or his designee shall, after review of any application for registration of a compost facility determine if he will approve or deny an application in whole or in part. The executive director shall base his decision on whether the application meets the requirements of this subchapter and the requirements of §332.4 of this title (relating to General Requirements).

- (d) At the same time that the executive director's decision is mailed to the applicant, a copy or copies of this decision shall also be mailed to all adjacent and affected landowners, residents, and businesses.
- (e) Motion for reconsideration. The applicant or a person affected may file with the chief clerk a motion for reconsideration, under §50.39(b)-(f) of this title (relating to Motion for Reconsideration), of the executive director's final approval of an application.

Adopted April 16, 1997

Effective May 15, 1997

## §332.36. Location Standards.

Facilities shall meet all of the following locational criteria.

- (1) One-hundred year flood-plain. The facility shall be located outside of the one hundred-year floodplain unless the applicant can demonstrate that the facility is designed and will operate to prevent washout during a 100-year storm event, or obtains a Conditional Letter of Map Amendment (CLOMA) from the Federal Emergency Management Administration (FEMA) Administrator.
  - (2) Drainage. The facility shall not significantly alter existing drainage patterns.
  - (3) Wetlands. The facility shall not be located in wetlands.
- (4) Water wells. The facility shall be located at least 500 feet from all public water wells and at least 150 feet from private water wells.
- (5) Surface water. The facility shall be located at least 100 feet from creeks, rivers, intermittent streams, lakes, bayous, bays, estuaries, or other surface waters in the state.
- (6) Set back distance from facility boundary. The set back distance from the facility boundary to the areas for receiving, processing, or storing feedstock or final product shall be at least 50 feet.
- (7) Edwards aquifer recharge zone. If located over the Recharge Zone of the Edwards Aquifer, a facility is subject to Chapter 313 of this title (relating to Edwards Aquifer). The Edwards Aquifer Recharge Zone is specifically that area delineated on maps in the office of the executive director.

Adopted November 1, 1995

Effective November 29, 1995

#### §332.37. Operational Requirements.

The operation of the facility shall comply with all of the following operational requirements.

(1) Protection of surface water. The facility shall be constructed, maintained and operated to manage run-on and run-off during a 25-year, 24-hour rainfall event and shall prevent discharge into waters in the state of feedstock material, including but not limited to, in-process and/or processed materials. Any waters coming into contact with feedstock, in-process, and processed materials shall be considered leachate.

Leachate shall be contained in retention facilities until reapplied on piles of feedstock, in-process, or unprocessed materials. The retention facilities shall be lined and the liner shall be constructed in compliance with paragraph (2) of this section. Leachate may be treated and processed at an authorized facility or as authorized by an NPDES permit. The use of leachate in any processing shall be conducted in a manner that does not contaminate the final product.

- (2) Protection of groundwater. The facility shall be designed, constructed, maintained and operated to protect groundwater. Facilities that compost municipal sewage sludge, grease trap waste, disposable diapers, and/or the sludge byproduct of paper mill production shall install and maintain a liner system complying with the provisions of subparagraph (A), (B), or (C) of this paragraph. The liner system shall be provided where receiving, mixing, composting, post-processing, screening and storage areas would be in contact with the ground or in areas where leachate, contaminated materials, contaminated product or contaminated water is stored or retained. The application shall demonstrate the facility is designed so as not to contaminate the groundwater and so as to protect the existing groundwater quality from degradation. For the purposes of these sections, protection of the groundwater includes the protection of perched water or shallow surface infiltration. The lined surface shall be covered with a material designed to withstand normal traffic from the composting operations. At a minimum the lined surface shall consist of soil, synthetic, or an alternative material that is equivalent to two feet of compacted clay with a hydraulic conductivity of 1 x 10<sup>-7</sup> centimeters per second or less.
- (A) Soil liners shall have more than 30% passing a number 200 sieve, have a liquid limit greater than 30% and a plasticity index greater than 15.
  - (B) Synthetic liners shall be a membrane with a minimum thickness of 20 mils.
  - (C) An alternative design that utilizes an impermeable liner (such as concrete).
- (3) Unauthorized and prohibited materials. The operator shall operate the facility in a manner that will preclude the entry of any unauthorized or prohibited materials from entering the composting process.
- (4) Access. Access to the facility shall be controlled to prevent unauthorized disposal of unauthorized or prohibited material and scavenging. The facility shall be completely fenced with a gate that is locked when the facility is closed.
- (5) Nuisance conditions. The facility shall be sited and operated in such a manner as to prevent the potential of nuisance conditions and fire hazards. Where nuisance conditions or fire hazards exist, the operator will immediately take action to abate such nuisances.
- (6) Aerobic composting required. The facility shall utilize functionally aerobic composting methods, although an anaerobic composting phase may be utilized in the early stages of processing, if it is followed by a period of functionally aerobic composting.
- (7) Site sign. The facility shall have a sign at the entrance indicating the type of facility, the registration number, hours of operation and the allowable feedstocks.

- (8) Access road. The facility access road shall be an all-weather road.
- (9) Authorization required for significant changes. The operator shall obtain written permission from the commission before changing the processing method or other significant changes to the original registration application.
- (10) Prohibited substances. Fungicides, herbicides, insecticides or other pesticides that contain constituents listed in 40 CFR Part 261, Appendix VIII Hazardous Constituents or on the Hazardous Substance List as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) shall not be applied to or incorporated into feedstocks, in-process materials or processed materials.

#### (11) End-product standards.

- (A) Facilities that compost municipal sewage sludge. For facilities that compost only municipal sewage sludge or compost municipal sewage sludge with any source-separated materials, the operator shall comply with the provisions of Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation) and shall not exceed the foreign matter criteria contained §332.72(d)(2)(A) and (D), of this title (relating to Final Product Grades).
- (B) All other registered facilities. The operator shall meet compost testing requirements set forth in §332.71 of this title (relating to Sampling and Analysis Requirements for Final Product), final product grades set forth in §332.72 of this title (relating to Final Product Grades), and label all materials which are sold or distributed as set forth in §332.74 of this title (relating to Final Product Labelling Requirements).
- (12) The operator shall employ at least one TNRCC-certified compost operator within six months from the adoption of this title, the initiation of operations at the compost facility, or the establishment of the compost certification program which ever occurs later and a TNRCC-certified compost operator shall routinely be available on site during the hours of operation.

Adopted November 1, 1995

Effective November 29, 1995

## §332.38. Records Requirements.

- (a) Facilities that compost municipal sewage sludge. For facilities that compost only municipal sewage sludge or compost municipal sewage sludge with any source-separated materials, the operator shall comply with the provisions of Chapter 312 of this title (relating to Sludge Use, Disposal, and Transportation).
  - (b) All other registered facilities.
- (1) The operator shall maintain records on-site, available for inspection by the commission, for a period consisting of the two most recent calendar years. The records shall consist of the following:

- (A) the facility registration obtained from the commission;
- (B) a log of abnormal events at the facility, including but not limited to, process disruptions, extended equipment failures, injuries, and weather damage; and
- (C) results of final product testing required by §332.71(j) of this title (relating to Sampling and Analysis Requirements for Final Product).
- (2) The operator shall maintain copies of the annual report on-site for the five most recent calendar years.

Effective November 29, 1995